IPROMO

PROGRAMME

MOUNTAINS IN A CHANGING CLIMATE: THREATS, CHALLENGES AND OPPORTUNITIES

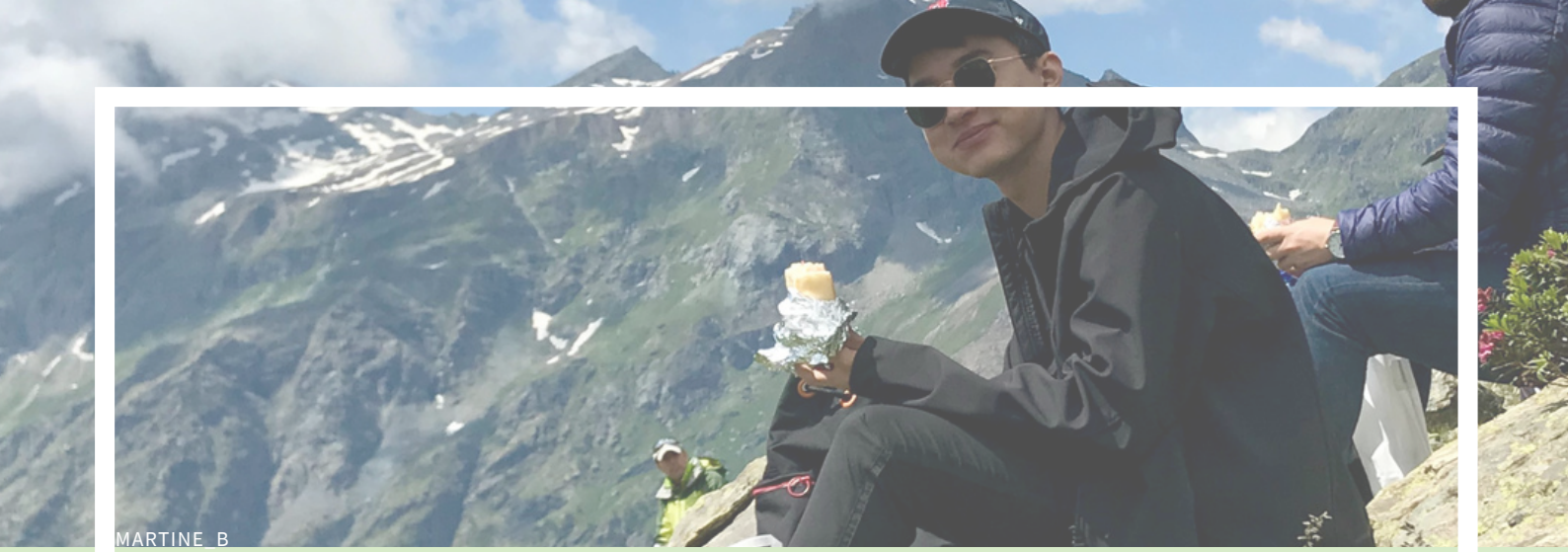
28 SEPTEMBER - 9 OCTOBER 2020
FIRST WEEK PROGRAMME

UNIVERSITA DEGLI STUDI DI TORINO

Mountain Partnership

UNIVERSITÀ DEGLI STUDI DELLA TUSCIA

YUKA MAKINO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INTRODUCTION

According to the Intergovernmental Panel on Climate Change (IPCC) the definition of climate change is: "A change in the state of the climate that can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer." Climate change may be due to natural internal processes or external forcing, or to persistent anthropogenic changes in the composition of the atmosphere or in land use. Because of its impacts on a wide array of human activities and environments, climate change must be considered in any local, subnational or national framework in order to achieve the Sustainable Development Goals. Climate change adaptation strategies inherently focus on connecting – people, sectors, production systems, and more - and therefore facilitates the targeting and harmonization of policies and achievement of results. Mountains are particularly vulnerable to climate change. Temperatures are rising faster at high elevations, with some areas experiencing global warming at a rate twice as fast as the global average. Glaciers are melting, more people and infrastructures are exposed to natural hazards, water resources and agriculture are being negatively impacted, and biodiversity is being lost. An integrated climate change approach in mountains allows for more effective sustainable management policies, adaptation and mitigation measures, which can prevent and mitigate the negative effects of climate change on mountain environments and communities. Sustainable management of mountains is essential for sustaining ecosystem services such as freshwater supply and food crop diversity, but also for combating the threats posed to local communities that are vulnerable to food insecurity and poverty. Climate change is just one of the many challenges faced by mountains.

Mining, deforestation, unsustainable agriculture and land use change are other key issues that must be considered when creating a sustainable development strategy in mountains. Improving livelihoods and sustaining ecosystem services requires fostering innovation, knowledge exchange and co-learning across mountain regions to scale out successful ‘seeds of innovation’. It requires partnerships between institutions, governments and communities, linking science and traditional knowledge and merging research with practice. An integrated approach in mountains allows for different stakeholders - government officials, civil society and community members, including indigenous peoples - to adopt a holistic planning and implementation scheme that involves both bottom up and top down processes, integrating traditional knowledge and innovation. Moreover, such approaches must be adopted globally and across sectors in order to effectively mitigate the impacts of climate change and prevent it from further escalating at the local, regional and global scale. However, adaptation and mitigation measures are just one part of the solution. The main goal must be to take urgent actions to reduce greenhouse emissions and to achieve the goals set by the Paris agreement.

WEEK 1 AGENDA

28 SEPTEMBER

14:30 CET — **Opening Ceremony:** Michele Freppaz, University of Turin (UNITO-DISAFA) and Giuseppe Scarascia Mugnozza, University of Tuscia (UNITUS-DIBAF)

15:00 CET — **An overview of the Mountain Partnership, IPROMO and this year's main topic:** Rosalaura Romeo, Food and Agriculture Organization of the United Nations (FAO-MPS)

15:30 CET — **Introduction and establishment of working groups:** Danilo Godone, National Research Council (CNR-IRPI)

16:00 - 18:00 CET — **Understanding Climate Change in Mountains,** Rodica Nitu, World Meteorological Organization (WMO)

29 SEPTEMBER

14:30 - 18:30 CET — **Principles of Sustainable Mountain Development,** Hans Schreier, University of British Columbia (UBC)

30 SEPTEMBER

14:30 - 18:30 CET — **Climate Change and Mountain Watershed Management,** Hans Schreier, University of British Columbia (UBC)

1 OCTOBER

09:00 - 13:00 CET — **Mountain Weather and Climate in a Warmer World,** Elisa Palazzi, National Research Council (CNR–ISAC) and Claudio Cassardo, University of Turin Department of Physics

2 OCTOBER

09:00 - 11:00 CET — **Climate Change and Mountain Policy and Governance,** Lucia Perugini, Euro-Mediterranean Center on Climate Change (CMCC)

11:00 - 13:00 CET — **Afforestation and Natural Afforestation in Mountain Areas,** Tommaso Chiti, University of Tuscia (UNITUS-DIBAF)

WEEK 2 AGENDA

5 OCTOBER

09:00 – 11:00 CET **Climate Change and Mountain Soils:**
Silvia Stanchi & Michele Freppaz, University of Turin (UNITO-DISAFA)

11:00 – 13:00 CET **Climate Change and Water/Hydropower Issues in Mountains:**
Daniele Bocchiola, Polytechnic of Milan (POLIMI-DICA)

6 OCTOBER

14:00 – 17:00 CET **Climate Change and Natural Hazards:**
Daniele Giordan & Niccolò Dematteis, National Research Council (CNR-IRPI)

7 OCTOBER

15:00 – 17:00 CET **Climate Change and Sustainable Mountain Tourism:**
Kim Langmaid, Colorado Mountain College

8 OCTOBER

10:00 – 12:00 CET **Climate Change and Mountain Vegetation, Biodiversity and Societies:**
Giorgio Vacchiano University of Milan (UNIMI-DISAA)

16:00 – 18:00 CET **Climate Change and Mountain Vegetation, Biodiversity and Societies:**
Larry Lopez, Yamagata University

9 OCTOBER

14:30 – 18:30 CET **Closing Ceremony**
Working Groups' Presentations
Closing Remarks